INTERNATIONAL SEARCH REPORT

international Application No

PCT/US2004/022724 CLASSIFICATION OF SUBJECT MATTER
C 7 F16K1/30 F170 IPC 7 F17C13/04 F16K1/36 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 F16K F17C Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 2 924 421 A (POHNDORF HENRY L) 1 - 189 February 1960 (1960-02-09) column 2, line 37 - column 4, line 46 figures Y EP 0 500 207 A (KYOHARA MASAKO) 1-5. 26 August 1992 (1992-08-26) 10-14 column 2, line 54 - column 3, line 48 column 4, line 16 - line 51 figures 1,6-8 Y DE 196 45 608 A (MESSER GRIESHEIM GMBH) 6-9. 7 May 1998 (1998-05-07) 15-18 column 2, line 57 - line 67 column 3, line 21 - line 31 figures 1,3 Further documents are listed in the continuation of box C. X X Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but 'A' document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-*O* document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled in the art. document published prior to the international filling date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 15 November 2004 22/11/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2260 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni,

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